



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/928,717

08/09/2001

Richard Fischbeck

00-106

6856

24124

7590

11/23/2007

BOHAN, MATHERS & ASSOCIATES, LLC

PO BOX 17707

PORTLAND, ME 04112-8707

EXAMINER

A, PHI DIEU TRAN

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

11/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/928,717	Applicant(s) FISCHBECK, RICHARD	
	Examiner Phi D. A	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32,33,35,36,42-47 and 51-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32,33,35,36,42-47 and 51-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's election with traverse of claims 51-59 in the reply filed on 8/21/07 is acknowledged. The traversal is on the ground(s) that the claims 51-59 read on elected specie of figure 4. This is found persuasive and the restriction is hereby withdrawn.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 32-33, 35-36, 42-43, 46-47, 51-56, 58, 59, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (2905113) in view of Chamberlain and Seaich (4263758).

Fuller shows a structure comprising a plurality of curving elements, the elements being arranged such that a distance and a direction of displacement between any two elements of adjacently placed elements being infinitely variable between and minimum limit and a maximum limit (the limits not yet known), the curving elements being placed in an overlapping arrangement (figure 1) with a portion of the wall said adjacent element so as to form said shell, the portion of the base of the first circular element overlaps a portion of said wall of at least three adjacent curving elements, so as to form the shell having a closed surface, the overlapping arrangement further includes an overlap of a portion of the base of the first element with a portion of the wall of at least a second element, a third element, and a fourth element, a first amount of overlap between the first element and the second element forming a first strut distance and direction between the vertexes of the first element and the second element, a second amount

of overlap between the first element and the third element forming a second strut distance and direction between the vertexes of the first element and the third element, a third amount of overlap between the first element and the fourth element forming a third strut distance and direction between the vertexes of the first and fourth elements, the first strut distance and direction being any distance and direction between the minimum and maximum limits (the limits are not yet known), the second strut distance and direction being any distance and direction between the maximum and minimum limits, the third strut distance is any distance and direction between the minimum and maximum limits, an opening is formed in the shell to provide access to an inner space of the shell, the element having an element length defined by a length of the wall from the base to the vertex and wherein the maximum limit is slightly less than a sum of the element lengths of any two adjacent elements, the element having an element length defined by a length of the wall from the base to the vertex and wherein the minimum limit is slightly greater than one-half of a sum of the element lengths of any two adjacent elements, the plurality of elements are arranged such that a distance and a direction of displacement between any two vertexes of adjacently placed elements provides an adjustability of the straight strut that is a strut distance that is infinitely variable between a minimum and a maximum limit.

Fuller does not disclose the elements being conical elements. each element of the plurality of curving elements having a base, a wall and a vertex, the element being a circular and said base being a circular base, the elements being arranged such that the vertex of the circular cone points outward from the shell.

Chamberlain discloses the use of a circular element to form the frame and shell of a structure.

Seach discloses the use of conical elements to form a frame and shell of a structure.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Fullern's structure to show the elements being conical elements with a base, a wall and a vertex as taught by Seaich and the elements being circular as taught by Chamberlain because it would have been an obvious matter of engineering design choice to choose a certain shape for the element to form the frame and shape of the structure as long as it provides for sufficient support and coverage of the structure.

Per claims 42-43, 46-47, Fuller as modified further shows the conical elements having the angular deficit Alpha of the conical element varies in magnitude from the angular deficit Alpha of an adjacent conical element, the plurality of conical elements including two groups of conical elements, each group having different magnitude of the angular deficit Alpha, the conical elements being constructed of sheet material from a group of material consisting of paper fiber products, sheet metal, polymeric material, a fastening means (adhesives) for attaching the conical elements to one another, the conical elements are placed in an overlapping arrangement wherein a portion of the base of the first conical element overlaps with a portion of the cone wall of the adjacent conical element so as to form the shell.

3. Claims 44, 45, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller in view of Chamberlain (4270320) and Seaich as applied to claim 32 or 51 above and further in view of Fuller (3203144).

Fuller as modified shows all the claimed limitations except for a skin that is placed over the shell, the conical elements being arranged with the vertex of the conical elements facing

inward and the vertex of other ones of the conical elements facing outward so as to form the shell having an irregular shape.

Fuller (...144) shows a skin that is placed over the shell, the conical elements being arranged with the vertex of the conical elements facing inward and the vertex of other ones of the conical elements facing outward so as to form the shell having an irregular shape.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Fuller's modified structure to show a skin that is placed over the shell, the conical elements being arranged with the vertex of the conical elements facing inward and the vertex of other ones of the conical elements facing outward so as to form the shell having an irregular shape because having a skin over the structure would provide an extra layer of protection for the structure against the elements as taught by Fuller, and having the vertex facing inwardly and outwardly as taught by Fuller, would provide a shell having an aesthetic design.

Response to Arguments

1. Applicant's arguments with respect to claims 32-33, 35-36, 42-47, 51-60 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
09/928,717
Art Unit: 3633

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phi Dieu Tran A

10/29/07